Figure 1

Chemically Modified \(\beta\)-amyloid Antigen

WO 2005/081872 PCT/US2005/005285

Figure 2
Liposome Reconstituted, Chemically Modified Amyloid-Antigen

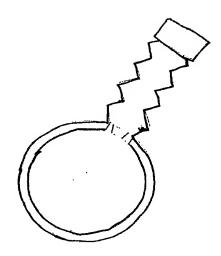


Figure 3
Multiple P₁₇₀ Antigen

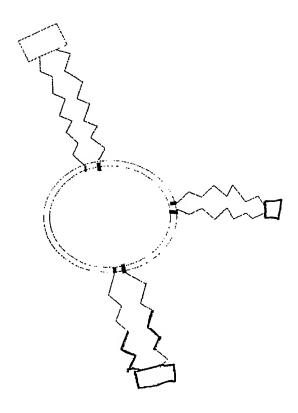


Figure 4 Synthetic Peptides Used For This Study



Fig. 4: Synthetic peptides used for this study (single-letter amino-acid code) a. PrP 57-64. WGQPHGGG b. PrP 89-106. WGQGGGTHSQWNKPSKPK: c. PrP 106-140. 106-126. PrP KTNMKHMAG: d. KTNMKHMAGAAAAGAVVGGLG: c. PrP 127-135. GYMLGSAMS: f. PrP 127-147. GYMLGSAMSRPIIHFGSDYED: g. PrP 106scrambled. 126 NGAKALMGGHGATKVMVGAAA: amino-acid sequence of peptides homologous to different fragments of the amyloid protein purified from GSS brains (residues 58 to ~ 150)¹². g. Scrambled version of PrP 106-126. the octapeptide "a" is repeated for 4 or 5 times in the PrP sequence.

Aß 4-11

 $\label{eq:continuous} \ddot{\text{Ac-Lys-Phe-Arg(Pbf)-His(Trt)-Asp(OtBu)-Ser(tBu)-Gly-Tyr(tBu)-Glu(OtBu)-Lys-Gly-OH} \\$

Aß 1-16

 \mathring{Ac} -Lys-Asp(OtBu)-Ala-Glu(OtBu)-Phe-Arg(Pbf)-His(Trt)-Asp(OtBu)-Ser(tBu)-Gly-Tyr(tBu)-Glu(OtBu)-Val-His(Trt)-His(Trt)-Gln(Trt)-Lys(Boc)-Lys-Gly-OH

$A\beta 22-35$

 \mathring{Ac} -Lys-Glu(OtBu)-Asp(OtBu)-Val-Gly-Ser(tBu)-Asn(Trt)-Lys(Boc)-Gly-Ala-Ile-Ile-Gly-Leu-Met-Lys-Gly-OH

Aß 29-40

Ac-Lys-Gly-Ala-Ile-Ile-Gly-Leu-Met-Val-Gly-Gly-Val-Val-Lys-Gly-OH

FIGURE 5

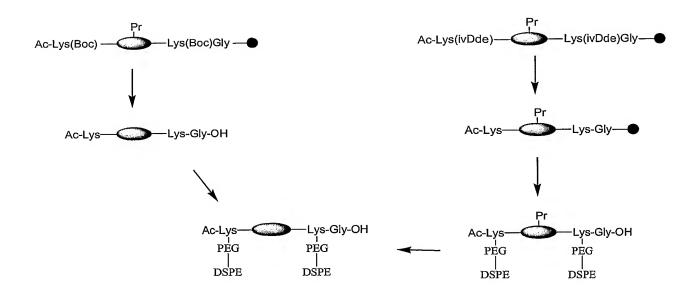


FIGURE 6

FIGURE 7

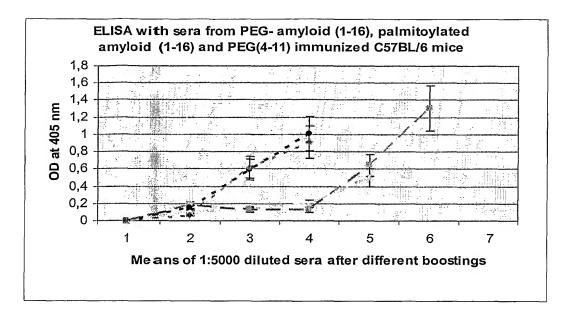


Figure 7: ELISA conducted with 1:5000 diluted sera from pegylated amyloid/ liposomes/ lipid A immunized C57BL/6 mice. PEG-A β_{1-16} (- -black), PEG-A β_{1-16} + ALUM (- -grey), PEG-A β_{4-11} (——grey). Means of the values of 10 mice per antigen; means of values from 2 mice are shown for A β_{1-16} +ALUM. As a control mean values of 12 palmitoylated A β_{1-16} (- - bright grey) injected animals are shown (published 2002).

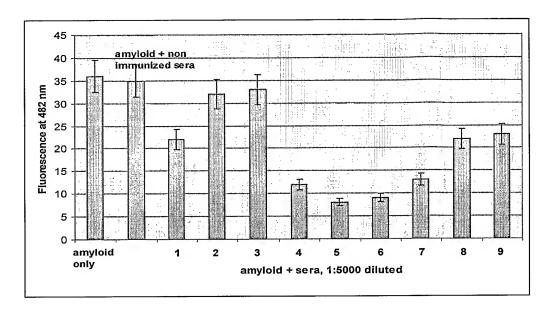


Figure 8

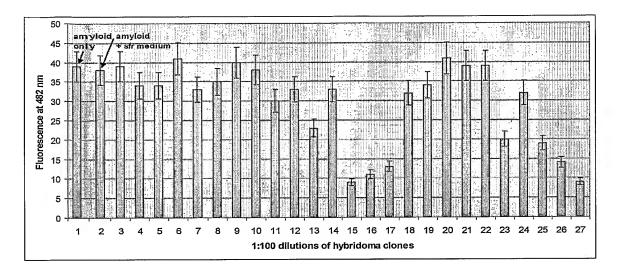


Figure 9

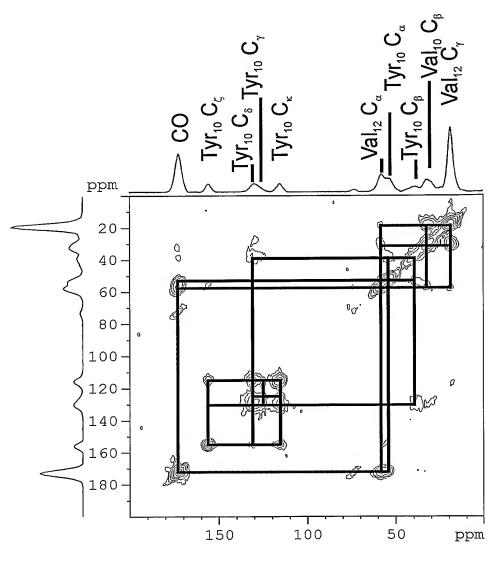


Figure 10

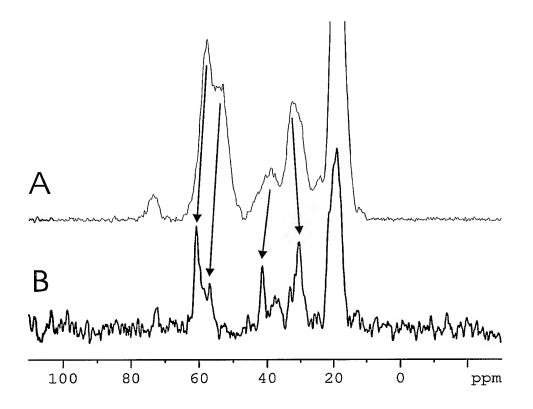
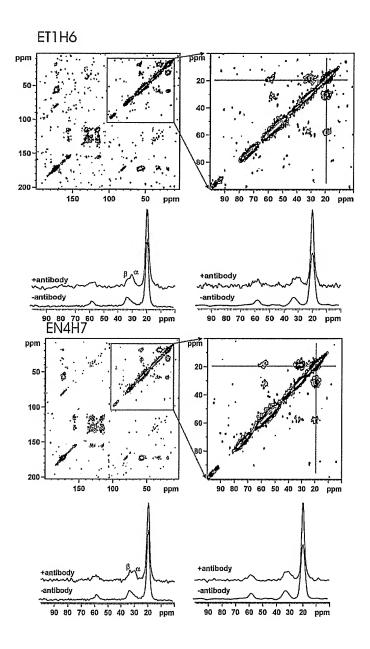


Figure 11

	Amyloid β-peptide fibers	Amyloid β-peptide fibers after 12 days of incubation with the antibody
¹² Val Cα	58 ppm	60 ppm
¹² Val C _β	33 ppm	30 ppm
¹⁰ Tyr C _{\alpha}	54 ppm	56 ppm
¹⁰ Tyr C _β	38 ppm	41 ppm

FIGURE 12



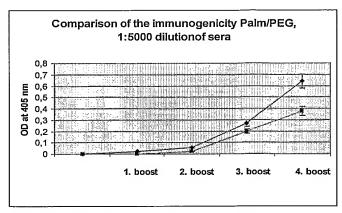


Figure 13: pink: Palm.- $A\beta_{1-16}$, blue: PEG- $A\beta_{1-16}$

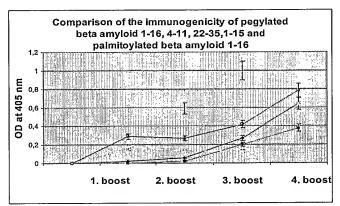


Figure 14: pink: Palm.-A β_{1-16} , blue: PEG-A β_{1-16} , turquoise: PEG-A β_{1-15} , violet: PEG-A β_{22-35} , yellow: PEG-A β_{4-11} .